

CLAIMS

1. – 34. (cancelled).

35. (previously added) An apparatus for delivering electrostatically charged particles to a carpet or fabric material, the apparatus comprising:

a) a container in which particles to be electrostatically charged are stored; and

b) means for delivering the particles from the container to the carpet or fabric material, said means comprising

i) a tube or pipe for delivering the carrier particles to the carpet or fabric material, and

ii) means for expelling particles at high velocity from the container to the carpet or fabric material,

36. (previously added) An apparatus according to claim 35 in which the material from which the tube or pipe is made is selected from the group consisting of perforated polyethylene, unperforated and perforated polyvinyl chloride, unperforated and perforated nylon, and unperforated and perforated polytetrafluoroethylene.

37. (previously added) An apparatus according to claim 36 in which the means for expelling particles at high velocity from the container to the material is compressed air or the suction effect of a vacuum cleaner.

38. (previously added) An apparatus according to claim 36 in which the wall of the tube or pipe is formed with holes.

39. (previously added) An apparatus according to claim 36 in which the charging region of the tube or pipe is located within the container.

40. (previously added) An apparatus according to claim 39 in which the tube or pipe can be stored in the container and moved out of the container for delivering charged particles.

B1 41. (previously added) A method for controlling and removing dust and other fine particles in a carpet or fabric material comprising the steps of:
providing a container for storing carrier particles;
passing said carrier particles at high velocity through a tube or pipe made of a material such that, as a result of frictional contact between the carrier particles and the inside of said tube or pipe, a minimum charge to mass ratio of $\pm 1 \times 10^{-4}$ C/Kg is imparted to said particles; and
expelling the resultant charged carrier particles at high velocity to the carpet or fabric material.

42. (previously added) A method according to claim 41 in which the tube or pipe is made of perforated polyethylene and the carrier particles are tannic acid immobilized on polyvinylpyrrolidone beads.

43. (previously added) A method according to claim 41 in which the tube is made of perforated or unperforated polyvinyl chloride and the carrier particles are selected

from the group consisting of nylon, polyvinylpyrrolidone, tannic acid immobilized on ponvinylypyrrolidone beads, maize, calcite treated with oils and celite.

44. (previously added) A method according to claim 41 in which the tube is made of perforated or unperforated nylon and the carrier particles are selected from the group consisting of polyester, polyvinylpyrrolidone, tannic acid immobilized on polyvinylpyrrolidone beads, cyclodextrin, untreated calcite and calcite treated with oils.

45. (previously added) A method according to claim 41 in which the tube is made of polytetrafluoroethylene and the carrier particles are selected from the group consisting of nylon, polyvinylpyrrolidone, tannic acid immobilized on polyvinylpyrrolidone beads, cyclodextrin, untreated calcite and calcite treated with oils.

46. (previously added) A method for dispensing charged particles to a surface from a container which contains uncharged particles, which method comprises the steps of:

entraining the uncharged particles in a stream of gas;

directing the stream of gas and entrained particles through a tube or pipe capable of imparting to the particles a minimum charge to mass ratio of $\pm 1 \times 10^{-4} \text{C/Kg}$, by frictional contact of the particles with the inner surface of said tube or pipe; and

directing the stream of gas and entrained charged particles to the surface, wherein a mixture of particles of at least two different materials is employed, the particles of a first material being capable of assuming, on charging, a charge of a particular polarity and the particles of a second material being capable of assuming, on charging, a charge of the opposite polarity to that of the first particles.

47. (previously added) A method according to claim 46 wherein the tube or pipe is arranged within the container.

48. (previously added) A method according to claim 47 wherein the tube or pipe is arranged in a non-linear fashion.

49. (previously added) A method according to claim 48 wherein the tube or pipe is formed as a coil.

B | 50. (previously added) A method for dispensing charged particles to a surface from a container which contains uncharged particles, which method comprises the steps of:

entraining the particles in a stream of gas;

directing the stream of gas and entrained particles through a tube or pipe capable of imparting to the particles a minimum charge to mass ratio of $\pm 1 \times 10^{-4} \text{ C/Kg}$, by frictional contact of the particles with the inner surface of said tube or pipe; and

directing the stream of gas and entrained charged particles to a surface, wherein the tube or pipe has a plurality of holes which are dimensioned so as to allow for electrical discharge through said holes, but not to allow the velocity of the stream of gas and entrained particles flowing through said holes to be substantially reduced.

51. (previously added) A method according to claim 50 wherein the holes each have a diameter of less than 5 micrometers.

52. (previously added) A method according to claim 50 wherein the tube or pipe is arranged within the container.

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Serial No. : 09/308,860
Filed : January 12, 2001
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Attorney's Docket No.: 08291-
600001 / SJA/TJ/47870/003

53. (previously added) A method according to claim 52 wherein the tube or pipe is arranged in a non-linear fashion.

54. (previously added) A method according to claim 53 wherein the tube or pipe is formed as a coil.

55. (cancelled)
